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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/727,305

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EXAMINER

MILORD, MARCEAU

ART UNIT

PAPER NUMBER

2618

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/727,305	Applicant(s) HOLLOWAY ET AL.	
	Examiner Marceau Milord	Art Unit 2618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mintz et al (US Patent No 6734823 B2) in view of Himmelstein (US Patent No 7092723 B2).

Regarding claims 1-2, 4-5, Mintz et al discloses a system for broadcasting short range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway comprising: a sequence of transceiving short range broadcast stations (30, 12 of fig. 1) along said highway, said stations (20-24 of fig. 1) spaced so that the broadcast ranges of said stations tangentially overlap each other (col. 3, line 51- col. 4, line 64; col. 9, lines 11-35; col. 10, lines 34-53; col. 30, lines 29-52); a sequence of motor vehicles moving along said roadway, each vehicle including a transceiver for said short range RF signals (col. 31, line 41- col. 32, line 51; col. 33, lines 11-49; col. 34, lines 17-37).

However, Mintz et al does not specifically disclose the features of a means in each of the motor vehicles with the transceivers for transmitting data specific to the transmitting motor vehicle; and means in the broadcast stations for broadcasting the data specific to the transmitting motor vehicle to all of the motor vehicle transceivers.

On the other hand, Himmelstein from the same field of endeavor discloses a vehicle and system for providing a communication link among a plurality of mobile vehicles comprises a broadband RF transceiver with antenna, a GPS receiver, an audio-visual interface, and a microprocessor with associated memory, where the microprocessor generates a communication by constructing data packets from a plurality of data fields, including sender information and receiver information (col. 1, line 55- col. 2, line 19). Furthermore, the microprocessor builds each communication packet and forwards the packet to the transceiver for transmission. The microprocessor first determines whether the incoming packet is addressed to the specific mobile unit. In addition, the microprocessor determines whether the incoming packet is a broadcast, and the microprocessor determines whether the specific address matches the mobile unit address. If either of these determinations is affirmative, the new packet is stored. The microprocessor then determines if there are other communication packets pending for processing (fig. 5; col. 3, lines 35 col. 4, line 32; col. 7, lines 16-43; col. 9, lines 14-52; col. 11, lines 16-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Himmelstein to the communication system of Mintz in order to provide a mobile communication system, which allows mobile vehicles to communicate with neighboring vehicles and roadside communication networks.

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Regarding claim 3, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein: said broadcast stations are cellular broadcast towers spaced on said roadway; and said transceivers in said motor vehicles are cellular telephones (col. 27, lines 47-61; col. 50-67; col. 33, lines 14-25).

Regarding claim 6, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to a breakdown of the transmitting vehicle (col. 23, lines 16-50).

Regarding claim 7, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to road hazards in the respective zone as noted by the transmitting vehicle (col. 23, lines 16-50; col. 28, lines 27-67).

Regarding claim 8, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to traffic conditions in the respective zone as noted by the transmitting vehicle (col. 23, lines 30-59).

Regarding claim 9, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to traffic conditions in zones other than the broadcast zone as noted by a transmitting vehicle (col. 26, lines 24-50; col. 27, lines 41-61).

Regarding claim 10, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, further including display means in each of said motor vehicles associated with said transceivers for displaying received broadcast data (col. 23, lines 23-50; col. 27, lines 24-49).

Regarding claims 11-12, 14-15, Mintz et al discloses a system for broadcasting short range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway comprising a sequence of transceiving short range broadcast stations (30, 12 of fig. 1) along said highway, said stations (20-24 of fig. 1) spaced so that the broadcast ranges of said stations tangentially overlap each other (col. 3, line 51- col. 4, line 64; col. 9, lines 11-35; col. 10, lines 34-53; col. 30, lines 29-52); moving a sequence of motor vehicles along said roadway, each vehicle including a transceiver for said short range RF signals (col. 31, line 41- col. 32, line 51; col. 33, lines 11-49; col. 34, lines 17-37).

However, Mintz et al does not specifically disclose the steps of enabling the transmission from each of said motor vehicles with said transceivers of data specific to the transmitting motor vehicle; and enabling each of the broadcast stations to broadcast the data specific to the transmitting motor vehicle to all of the motor vehicle transceivers.

On the other hand, Himmelstein from the same field of endeavor discloses a vehicle and system for providing a communication link among a plurality of mobile vehicles comprises a broadband RF transceiver with antenna, a GPS receiver, an audio-visual interface, and a microprocessor with associated memory, where the microprocessor generates a communication by constructing data packets from a plurality of data fields, including sender information and receiver information (col. 1, line 55- col. 2, line 19). Furthermore, the microprocessor builds

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each communication packet and forwards the packet to the transceiver for transmission. The microprocessor first determines whether the incoming packet is addressed to the specific mobile unit. In addition, the microprocessor determines whether the incoming packet is a broadcast, and the microprocessor determines whether the specific address matches the mobile unit address. If either of these determinations is affirmative, the new packet is stored. The microprocessor then determines if there are other communication packets pending for processing (fig. 5; col. 3, lines 35 col. 4, line 32; col. 7, lines 16-43; col. 9, lines 14-52; col. 11, lines 16-40). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the technique of Himmelstein to the communication system of Mintz in order to provide a mobile communication system, which allows mobile vehicles to communicate with neighboring vehicles and roadside communication networks.

Regarding claim 13, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein: said broadcasts are cellular communications; and said transceivers in said motor vehicles are cellular telephones (col. 27, lines 47-61; col. 50-67; col. 33, lines 14-25).

Regarding claim 16, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to a breakdown of the transmitting vehicle (col. 23, lines 16-50).

Regarding claim 17, Mintz et al as modified discloses a system for broadcasting short range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein

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said broadcast information relates to road hazards in the respective zone as noted by the transmitting vehicle (col. 23, line 39- col. 24, line 36).

Regarding claim 18, Mintz et al as modified discloses a system for broadcasting short range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to traffic conditions in the respective zone as noted by the transmitting vehicle (col. 26, lines 24-50; col. 27, lines 41-61).

Regarding claim 19, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, wherein said broadcast information relates to traffic conditions in zones other than the broadcast zone as noted by a transmitting vehicle (col. 23, line 39- col. 24, line 36).

Regarding claim 20, Mintz et al as modified discloses a system for broadcasting short-range RF real-time information to motor vehicles (figs. 1-3) traveling along a roadway, further including the step of displaying received broadcast data in association with said transceivers in each motor vehicle (col. 23, lines 23-50; col. 27, lines 24-49).

Conclusion

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Arab discloses a vehicle notification system that includes a control panel removably position able inside a vehicle and including a transceiving mechanism for identifying imminent environmental conditions.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marceau Milord whose telephone number is 571-272-7853. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4177. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MARCEAU MILORD

Marceau Milord
Primary Examiner
Art Unit 2618


MARCEAU MILORD
PRIMARY EXAMINER